University of California
College of Agriculture
Agricultural Experiment Station
Berkeley, California

APPRAISAL OF CALIFORNIA AGRICULTURAL PRODUCTIVE CAPACITY ATTAINABLE IN 1952

by

Trimble R. Hedges and Warren R. Bailey

Results of a Cooperative Investigation Conducted in California by the California State Committee on Survey of Agricultural Productive Capacity. This Committee Included Representatives of the University of California, the United States Department of Agriculture, and State Agencies.

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Foreword

The following report is an outgrowth of the work of the California State Committee on Survey of Agricultural Productive Capacity. These estimates for 1952 were prepared on August 30, 1951, by a special subcommittee including chairmen of the various working subcommittees in addition to the several economists and statisticians included in the over-all California committee.1/

1/ The special subcommittee included W. R. Bailey, Lowell Clarke, J. P. Conrad, J. P. Fairbank, E. L. Haff, Jr., J. H. MacGillivray, J. T. Moody, E. L. Proebsting, J. F. Wilson, M. Yudelman, Arthur Shultis, Vice-Chairman, and T. R. Hedges, Chairman. Full credit for the actual statistical estimates in the various "forms" goes to this subcommittee. Particular credit is due Lowell Clarke of the California Crop and Livestock Reporting Service. Responsibility for the written text and the mechanics of the statistical presentation is assumed by the authors listed on the cover.

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by

Thomas R. Bailey and Edwin R. Bailey

Foreword

The following report is an outgrowth of the work in the California State Committee on survey of agricultural Problems. This Committee, whose activities for 1922 were reported on August 30, 1921, by a special subcommittee including chairman of the various existing subcommittees in addition to the several committees and administrative included in the over-all committee membership.[1]

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[1] The special subcommittee included R. R. Bailey, Lionel Stevens, L. P. Conrad, L. F. Fairbank, E. L. Hall, Jr., L. L. Lewis and Harvey, C. T. Ivory, E. L. Ivenbling, L. E. Williams, V. Chesney, Arthur Smith, Ralph, Lee-Chatham, and F. L. Hodges, Chairman. Acknowledgments for the actual educational activities in the various "Farm" work in this subcommittee, particularly credit to the Lowell Clarke of the California Farm and Livestock Bureau for service. Responsibility for the written text and the conclusions of the educational presentation is assumed by the authors listed on the cover.

Appraisal of Agricultural Productive Capacity, 1952[2/]

This report projects the attainable level and pattern of production in 1952 for farm products in California. The specific objectives in this 1952 report were (1) to prepare the best possible estimates of the acreage and yield of the various crops for 1952, (2) to prepare similar estimates for livestock numbers and production, (3) to base these estimates on the same assumptions of over-all demand, availability of production items, and price level and interrelationships made available by the United States Bureau of Agricultural Economics as are used by other state committees, and (4) to follow such procedure as will facilitate considering and summarizing the California estimates together with similar reports from the other states. The material incorporated in this report should also be consistent with the findings of the more elaborate study concerning attainable agricultural productive capacity in 1955. The estimates prepared and incorporated in this report represent the best collective judgment of the subcommittee which prepared them considering the time available.

The factual basis for this report included (a) detailed historical and current estimates prepared by the California Crop and Livestock Reporting Service plus (b) the instructions and assumptions furnished by the United States Bureau of Agricultural Economics. The price assumptions, among the

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2/ The State Committee on Survey of Agricultural Productive Capacity in California was appointed by Director Paul Sharp in June 1951. This California committee and similar groups in other states were constituted at the suggestion of the Joint Land-Grant College-United States Department of Agriculture Committee on Appraisal of Agricultural Productive Capacity. The primary function of each state committee is to appraise the attainable level of farm production in 1955 and report to the national committee. Such information is considered vital in the unsettled world situation to insure optimum use of resources in time of national emergency. This 1952 report is a by-product of the procedure pointing to the more elaborate 1955 statement. Members of the California committee included: V. S. Asmundson, University of California, Davis; W. R. Bailey, Bureau of Agricultural Economics, Berkeley; J. P. Conrad, University of California, Davis, Chairman of Crop and Livestock Statistics, Crop Production, and Agronomic Crops subcommittees; R. Bainer, University of California, Davis; H. D. Chapman, University of California, Riverside; L. M. Clarke, California Crop and Livestock Reporting Service, Sacramento; J. P. Fairbank, University of California, Berkeley, Chairman of Labor and Machinery Subcommittee; G. E. Gordon, University of California, Berkeley; C. N. Johnston, University of California, Davis; (Mrs.) Margot W. Lenhart, California Department of Employment, Sacramento; E. G. Linsley, University of California, Berkeley; J. H. MacGillivray, University of California, Davis, Chairman of Truck Crops Subcommittee; J. T. Moody, Production and Marketing Administration, Berkeley; H. P. Olmo, University of California, Davis; E. L. Proebsting, University of California, Davis, Chairman of Fruit Crops Subcommittee; W. R. Schoonover, University of California, Berkeley; C. E. Scott, University of California, Berkeley; G. A. Scott, California Crop and Livestock Reporting Service, Sacramento; J. F. Wilson, University of California, Davis, Chairman of Livestock Subcommittee; L. R. Wohletz, Soil Conservation Service, Berkeley; M. Yudelman, University of California, Berkeley, Assistant Secretary; E. L. Haff, Jr., University of California, Davis, Secretary; A. Shultis, University of California, Berkeley, Vice-Chairman; and T. R. Hedges, University of California, Davis, Chairman.

Appendix to Industrial Investigation Commission, 1919.

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latter, were used in projecting tentative California assumed prices (Table 2).3/ It has been hoped originally that there also would be available a considerable body of the analytical material assembled for the 1955 report. This information did not materialize before the deadline for submitting the 1952 report, however, and the observations and experience of members of the subcommittee, therefore, were substituted.

State Total Changes in Acreage

Major acreage changes in field crops may be expected in 1952. The cereal group, in particular, is expected to show important acreage gains due to their unusually low levels in 1951 (Table 1). Increases, also, are expected for sugar beets and alfalfa. These crops, too, were reduced sharply in 1951. Irrigated pasture acreage again is expected to expand by the 5 per cent that has characterized each of recent years.

The changes in the state total cropping pattern between 1950 and 1951 were considered heavily in estimating the 1952 attainable acreage. Detailed data are shown in Form 1 and are further summarized in a special table (Table 1). Acreage probably will decrease from 1951 to 1952 for a group of major cash crops. This group, including cotton, rice, tomatoes, beans, and flaxseed, increased 928,500 acres from 1950 to 1951 and in the latter year occupied nearly 2,250,000 acres, a total that is deemed excessive considering available land and water (Figure I). Cotton was responsible for 81 per cent of this acreage shift; planted acres increased over 100 per cent between 1950 and 1951. There also were very important acreage increases for rice and canning tomatoes; the latter almost doubled between the two years.

A combination of changes in relative prices and other factors explains the marked 1950 to 1951 shifts in acreage for the crops indicated (Table 1). Cotton, in particular, was very largely affected by the sharply higher level of prices received for the 1950 crop as compared with 1949 (Table 2). Canning tomato growers, also, were stimulated to a considerable extent by the higher contract prices offered for the 1951 crop. Another major factor for cotton and rice was the removal of the Production and Marketing Administration acreage limitations in 1951. The acreage increase for tomatoes again resulted partly from grower reaction to unfavorable harvesting conditions for sugar beets in 1950.

Sufficiently detailed data were not available to pin point the exact sources of the acreage shifted into the above-mentioned crops in 1951. Some indications can be had, however, by noting major crops showing decreases. The cereal group

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3/ The projected California farm prices for 1952 were based on projected United States farm prices:

(1) The percentage change of 1952 United States farm prices from the 1947-1950 average was determined for each major commodity.

(2) This ratio was multiplied times California 1947-1950 average farm prices.

(3) The resulting California price projection is listed as "average 1952 price."

These prices are considered "projected prices" rather than estimates because they are meaningful only in terms of the over-all national price-affecting forces assumed for 1952.

[illegible] been used to production functions [illegible] [illegible] [illegible]

declined 418,000 acres; sugar beets and potatoes, 108,000 acres; and alfalfa, 127,000 acres (Table 1 and Form 1). These three groups thus were responsible for 653,000 acres reduction from the 1950 pattern of crops for the state. Not all this acreage was shifted into the cash crops showing marked increases; considerable reduction in the cereal group, particularly, was due to weather conditions. It is recognized, nevertheless, that a major percentage of the 653,000 acres undoubtedly was shifted to one or another of the cash crops. This fact is important in considering probable field crop acreages in 1952. Aside from displacing other crops, cotton gained acreage at the expense of land that may have been fallowed, idle, or pastured during the 1950 season. It was a matter of considerable concern in the San Joaquin Valley area during 1950 to find a use for the land that the acreage limitation program required to be removed from cotton production. Not all of this land was put into major crops. Finally, a considerable area of newly developed land in the San Joaquin Valley was planted in cotton in 1951.

It is estimated that in 1952 approximately 154,000 acres of land probably will be taken out of the major California crops that showed sharp acreage increases in 1951 (Table 1). Cotton will absorb most of this reduction, 91,000 acres, with approximately equal total declines of about 20,000 acres each in rice, canning tomatoes, and beans. The percentage reduction for canning tomatoes will be considerably greater than for the other crops, however, because of its relatively smaller total acreage. It is further estimated that the cereal group will show important gains in 1952 which will restore some of the acreage lost by this group in 1951. Plantings are expected to increase 188,000 acres or sharply less than the 262,000 estimated for acres harvested. This expectation reflects the relatively heavy abandonment due to unfavorable weather in the spring of 1951. Sugar beets are expected to increase 16,000 acres, or about 11 per cent, and alfalfa also is expected to regain a part of the acreage lost the preceding year. Cotton acreage is expected to decrease in 1952 largely as an adjustment to some degree of overexpansion in 1951.

The absence of such spectacular price rises as that for cotton between the 1949 and 1950 harvest seasons is considered to be highly important in regulating the 1952 level of acreage for the cash crops. The price assumptions used indicate cotton prices of 1952 at about 36 cents a pound or only 1 cent above 1950 (Table 2).4/ It was anticipated, further, that little upward change in price of canned tomatoes, rice, beans, or flaxseed could be expected. The cereal crops and alfalfa, on the other hand, may show more important price increases. The subcommittee also assumed in preparing these estimates that no Production and Marketing Administration acreage limitations will be in effect during 1952.5/ It was recognized by the subcommittee, on the other hand, that subsidy programs or other direct stimuli could be made highly effective in modifying acreage from the indicated 1952 attainable if such policies are established. No specific

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4/ Cotton prices rose sharply during the 1951 harvest season largely in response to progressive reductions in the total production estimates, and at the end of 1951 were approximately at the same level as a year earlier. Price change, therefore, is not a factor encouraging reduced California cotton acreage in 1952.

5/ No marketing quotas or acreage limitations are in effect in 1952 for major California field crops. U. S. Department of Agriculture. 1952 Production Goals. November, 1951.

declined 417,000 acres, sugar beets and potatoes, 173,000 acres; and alfalfa, 127,000 acres (Table 1 and Figure 1). Thus these crops that were responsible for 853,000 acres reduction from the 1950 pattern of crops for the state, yet all this acreage was shifted into the cash crops showing marked increases. Considerable reduction in the cereal group, particularly, was due to weather conditions. It is recognized, nevertheless, that a major percentage of the 854,000 acres undoubtedly was shifted to one or another of the cash crops. This fact is important in considering probable field crop acreages in 1952. Aside from displacing other crops, cotton gained acreage at the expense of land that may have been fallowed, idle, or pastured during the 1950 season. It was a matter of considerable concern in the San Joaquin Valley area during 1950 to find a use for the land that the acreage limitation program required to be removed from cotton production. Not all of this land was put into other crops. Finally, a considerable area of newly developed land in the San Joaquin Valley was planted to cotton in 1951.

It is estimated that in 1952 approximately 175,000 acres of land probably will be taken out of the major California crops that showed sharp acreage increases in 1951 (Table 1). Cotton will account for most of this reduction, 75,000 acres, with approximately equal total declines of about 20,000 acres each in corn, canning tomatoes, and beans. The percentage reduction for canning tomatoes will be considerably greater than for the other crops, however, because of the relatively smaller total acreage. It is further estimated that the cereal group will show important gains in 1952 which will regain some of the acreage lost by this group in 1951. Plantings are expected to increase 409,000 acres or slightly less than the 432,000 estimated for cereal harvested. This expectation reflects the relatively heavy abandonment due to unfavorable weather in the spring of 1951. Sugar beets are expected to increase 10,000 acres, or about 11 per cent, and alfalfa also is expected to regain a part of the acreage lost the preceding year. Cotton acreage is expected to decrease in 1952 largely as an adjustment to some degree of overexpansion in 1951.

The absence of such spectacular price rises as that for cotton between the 1949 and 1950 harvest seasons is considered to be highly important in regulating the 1952 level of acreage for the cash crops. The price expectations used indicate cotton prices of 1952 at about 30 cents a pound or only 1 cent above 1951 (Table 1).1/ It was anticipated, further, that little upward change in prices of canned tomatoes, rice, beans, or flaxseed would be expected. The cereal crops and alfalfa, on the other hand, may show more important price increases. The assumption also was made in preparing these estimates that no Production and Marketing Administration acreage limitations will be in effect during 1952.2/ If the programs by any commodities, on the other hand, are suddenly required by major market effects, would be made highly effective in modifying acreage from the indicated 1952 situations if such programs are established. No question

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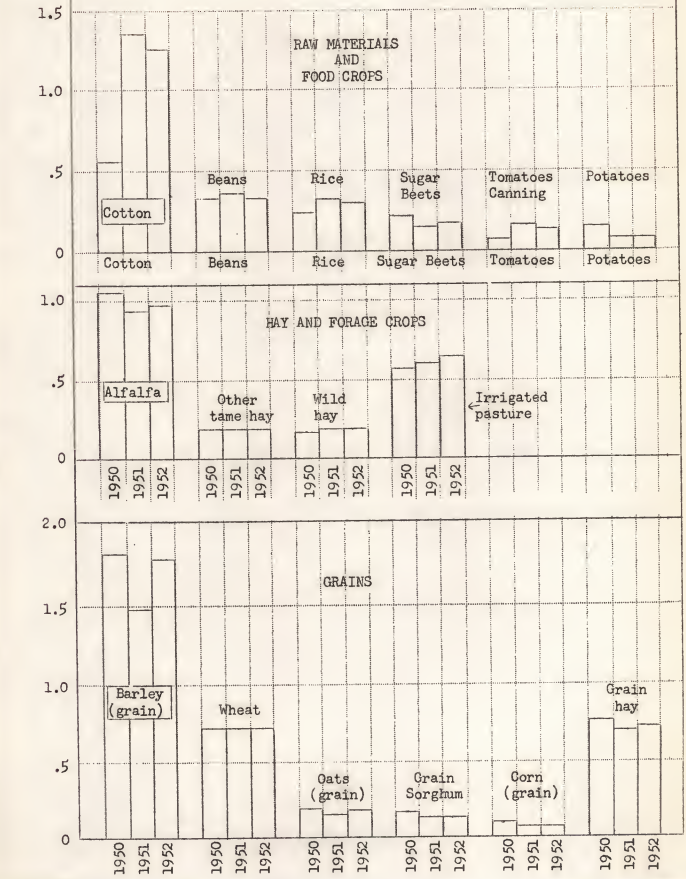
1/ Cotton prices rose sharply during the 1951 harvest season largely in response to progressive reductions in the total production estimates, and at the end of 1951 were approximately at the same level as a year earlier. Price change, therefore, is not a factor encouraging reduced California cotton acreage in 1952.

2/ No marketing quotas or acreage limitations are in effect as yet for major California field crops. U. S. Department of Agriculture. 1952 Production Goals, December, 1951.

Figure I--Field crop acreage in California; 1950, 1951, and estimates of 1952 attainable.

(Source: Table 1)



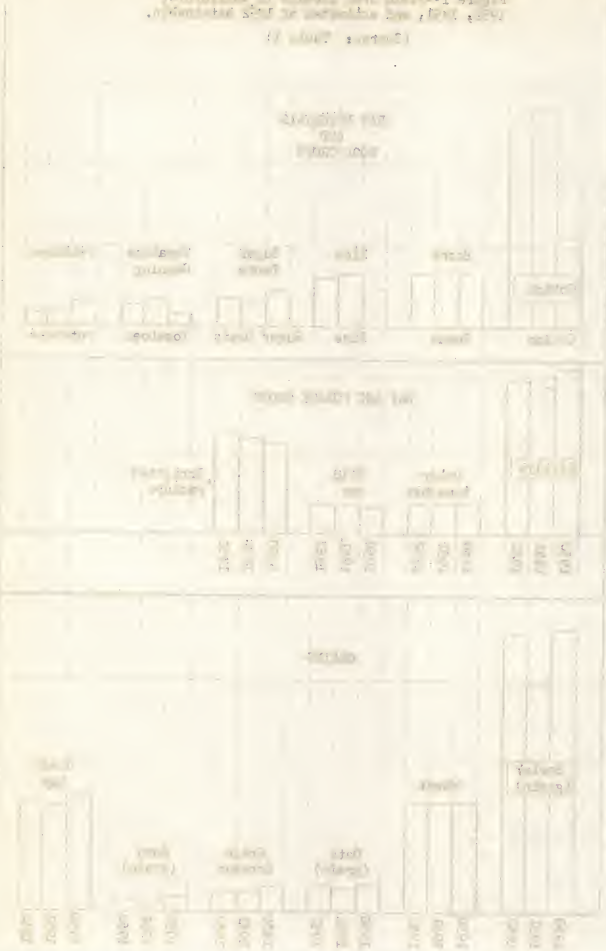


TABLE 1

Estimated Shifts in Land Use in California for Major Field Crops
1950 to 1951 and 1951 to 1952

Use of farm land	Acreage	1950	1951	Acreage change, 1950 to 1951	1952 attainable	Acreage change, 1951 to 1952	Percentage change, 1951 to 1952
		1,000 acres					per cent
Raw Materials and Food Crops							
Cotton, all upland[a]	Planted	586	1,341	+755	1,250	- 91	- 7
Rice	Planted	240	319	+ 79	300	- 19	- 6
Tomatoes (canning)		76	148	+ 72	125	- 23	-16
Beans, dry edible	Planted	319	339	+ 20	320	- 19	- 6
Flaxseed	Planted	60	62	+ 2	60	- 2	- 3
Total crops increasing, 1950-51		1,281	2,209	+929	2,055	-154	- 7
Sugar beets	Planted	218	149	- 69	165	+ 16	+11
Potatoes--early	Planted	78	49	- 29	49	0	0
Potatoes--late	Planted	45	35	- 10	35	0	0
Total crops decreasing, 1950-51		341	233	-108	249	+ 16	+ 7
Feed Grains							
Wheat	Planted	710	710	0	710	0	0
Barley	Planted	2,291	2,016	-275	2,176	+160	+ 8
Barley for grain	Harvested	1,800	1,494	-306	1,740	+246	+16
Oats	Planted	602	512	- 90	540	+ 28	+ 5
Oats for grain	Harvested	196	163	- 33	175	+ 12	+ 8
Grain, cut for hay[b]	Harvested	733	696	- 37	700	+ 4	+ 1
Grain sorghum	Planted	142	106	- 36	106	0	0
Sorghum for grain	Harvested	136	101	- 35	101	0	0
Corn, all	Planted	86	69	- 17	69	0	0
Corn for grain	Harvested	42	32	- 10	32	0	0
Total:							
Planted		3,831	3,413	-418	3,601	+188	+ 6
Harvested		2,907	2,486	-421	2,748	+262	+11

(Continued on next page.)

Table 1 continued.

Use of farm land	Acreage	1950	1951	Acreage change 1950 to 1951	1952 attainable	Acreage change 1951 to 1952	Percentage change 1951 to 1952
		1,000 acres					per cent
Hay and Forage Crops							
Alfalfa	Planted	1,058	931	-127	960	+29	+3
Other tame hay b/	Planted	159	159	0	159	0	0
Wild hay	Planted	177	186	+ 9	186	0	0
All hay and forage crops		1,394	1,276	-118	1,305	+29	+2
Irrigated pasture		682	702	+ 20	737	+35	+5
Total		2,076	1,978	- 98	2,042	+64	+3

a/ Includes minute acreage of American-Egyptian.

b/ "Other tame hay" excludes grains cut for hay.

Source: Acreage data in Form 1.

FORM 1

Use of California Farm Land; Estimates of 1952 Attainable, with Comparisons[a]

Use of farm land	Acreage	Reported for 1950	Reported or estimated for 1951	1952 attainable
	1	2	3	4
		acres		
Corn, all	Planted	86,000	69,000	69,000
Corn for grain	Planted	(42,000)	(32,000)	(32,000)
Corn for silage	Harvested	(32,000)	(27,000)	(27,000)
Sorghums, all except sirup	Planted	142,000	106,000	106,000
All sorghums for grain	Harvested	136,000	101,000	101,000
All sorghums for silage	Harvested			
Cotton, all upland	Planted	586,000	1,340,700	1,250,000
Cotton, American Egyptian	Planted	500	300	300
Safflower	Harvested	27,000	16,000	16,000
Castor beans	Harvested	2,400	20,000	20,000
Hops	Harvested	9,400	9,400	9,400
Sugar beets	Planted	218,000	149,000	165,000
Irish potatoes				
Late	Planted	(45,000)	(35,000)	(35,000)
Early	Planted	(78,000)	(49,000)	(49,000)
Total	Planted	123,000	84,000	84,000
Beans, dry edible	Planted	319,000	339,000	320,000
Tomatoes (canning)		75,500	148,000	125,000
Other truck crops		537,700	519,700	525,000
Other intertilled crops, total		137,800	105,000	110,000
Adjustment for multiple use[b]		383,300	444,100	420,000
Total cropland used for intertilled crops[c]		1,875,000	2,457,000	2,374,700
Oats	Planted	602,000	512,000	540,000
Barley	Planted	2,291,000	2,016,000	2,176,000
Winter wheat	Planted	710,000	710,000	710,000
Spring wheat	Planted			
Oats for grain	Harvested	(196,000)	(163,000)	(175,000)
Barley for grain	Harvested	(1,800,000)	(1,494,000)	(1,740,000)
Grains cut green for hay	Harvested	(733,000)	(696,000)	(700,000)

(Continued on next page.)

Form 1 continued.

Use of farm land	Acreage	Reported for 1950	Reported or estimated for 1951	1952 attainable
	1	2	3	4
		acres		
Rye for grain	Harvested			
Flaxseed	Planted	60,000	62,000	60,000
Rice	Planted	240,000	319,000	306,000
Other close-growing crops				
Adjustment for multiple use[b]				
Total cropland used for close-growing crops[c]		3,903,000	3,619,000	3,792,000
Hay, all tame	Harvested	1,217,000	1,080,000	1,119,000
Alfalfa hay	Harvested	(1,058,000)	(921,000)	(960,000)
Other tame hay	Harvested	(159,000	(159,000)	(159,000)
Grain hay	Harvested	(733,000)	(696,000)	(700,000)
Grass silage	Harvested			
Seeds, hay and cover crop, all	Harvested	(217,000)	(220,000)	(190,000)
Alfalfa	Harvested	(115,000)	(115,000)	(85,000)
Ladino	Harvested	(35,000)	(45,000)	(45,000)
Other	Harvested	(67,000)	(60,000)	(60,000)
Rotation (cropland) pasture	Harvested	807,000	827,000	865,000
All irrigated pasture		(682,000)	(702,000)	(740,000)
Sudan and temporary		(125,000)	(125,000)	(125,000)
Total cropland used for sod crops[c]		2,024,000	1,917,000	1,984,000
Fruit and nuts	Bearing	1,367,600	1,379,570	1,375,000
Fruit and nuts	Nonbearing	127,800	128,000	128,000
Total cropland used for crops[c]		9,297,000	9,495,570	9,653,700
Summer fallow and idle cropland		1,227,000	1,063,430	1,000,000
Total cropland[c]		10,524,000	10,559,000	10,653,700
Wild hay	Harvested	177,000	186,000	186,000
Open permanent pasture		18,500,000	18,500,000	18,500,000
Woods pastured		3,300,000	3,300,000	3,300,000
Woods not pastured		700,000	700,000	700,000

(Continued on next page.)

Dep. & item head	Chapter	Revised for 1961	Revised for 1962	Total allotments
		$	$	$
	Revenue			
Gas tax grants	Revenue	85,000	85,000	85,000
Highway	Revenue	4,000,000	4,000,000	4,000,000
Misc.				
Other miscellaneous items				
Allotments for multiple uses				
Other revenues used for other-purpose accounts				
Gas, oil, tax	Revenue	4,000,000	4,000,000	4,000,000
Licenses, etc.	Revenue	4,000,000	4,000,000	4,000,000
Motor vehicle fees	Revenue	4,000,000	4,000,000	4,000,000
Motor fuel tax	Revenue	4,000,000	4,000,000	4,000,000
Other	Revenue			
Other income	Revenue			
Bonds, for acq. const. equip., etc.	Revenue	(10,000,000)	(500,000)	(10,500,000)
Highway	Revenue	(10,000,000)	(10,000,000)	(20,000,000)
Safety	Revenue	(10,000,000)	(10,000,000)	(20,000,000)
Other	Revenue	(10,000,000)	(10,000,000)	(20,000,000)
Balance forward from prior year	Revenue	(10,000,000)	(10,000,000)	(20,000,000)
Balance forward				
All forfeited revenue		(500,000)	(500,000)	(1,000,000)
Other non-recurring		(500,000)	(500,000)	(1,000,000)
Total available used for net income		4,000,000	4,000,000	8,000,000
Highway	Expenditure	4,000,000	4,000,000	8,000,000
Other and misc.		4,000,000	4,000,000	8,000,000
Other and misc.	Expenditure	500,000	500,000	500,000
Total available used for support		4,000,000	4,000,000	8,000,000
Highway trustee and title employed		4,000,000	4,000,000	8,000,000
Total employed		10,000,000	10,000,000	20,000,000
Total employed	Expenditure	10,000,000	10,000,000	20,000,000
Net, or		500,000	500,000	500,000
Net revenues surplus		10,000,000	10,000,000	20,000,000
Other revenues		4,000,000	4,000,000	8,000,000
Other use payment		500,000	500,000	500,000

Form 1 continued.

Use of farm land	Acreage	Reported for 1950	Reported or estimated for 1951	1952 attainable
	1	2	3	4
		acres		
Other land in farms		2,299,000	2,255,000	2,160,300
Total land in farms		35,500,000	35,500,000	35,500,000
Grazing land not in farms		22,038,950	22,038,950	22,038,950
Other land not in farms		42,814,970	42,814,970	42,814,970
Total land area		100,353,920	100,353,920	100,353,920

a/ Prepared August 30, 1951, by Special Subcommittee of California State Committee on Agricultural Productive Capacity.

b/ In making the adjustment for multiple use of land by crops in the same group or in two or more groups, the first use in the crop year is considered to be the primary use.

c/ Total acres used for crops is less than the sum of the acreages of individual crops to the extent that two or more crops were, or will be, planted on, or harvested from, the same land during the year.

Source: Reported data are official estimates of the California Crop and Livestock Reporting Service; other data are estimates of the subcommittee.

Table 1 continued.

Use of farm land	Acreage	Reported for 1950	Reported or estimated for 1951	1951 estimate
	1	2	3	4
		acres		
Other land in farms		2,243,000	1,243,000	1,105,000
Total land in farms		35,[illegible],000	35,[illegible],000	35,[illegible],000
Grazing land not in farms		22,125,980	22,[illegible],[illegible]	22,[illegible],[illegible]
Other land not in farms		42,814,970	42,814,970	42,814,970
Total land area		100,[illegible],[illegible]	100,[illegible],[illegible]	100,[illegible],[illegible]

a/ Prepared August 30, 1951, by special Subcommittee of California State Committee on Agricultural Productive Capacity.

b/ In making the adjustment for multiple use of land by crops in the same group or in two or more groups, the first use in the crop year is considered to be the primary use.

c/ Total acres used for crops is less than the sum of the acreages of individual crops to the extent that two or more crops were, or will be, planted on, or harvested from, the same land during the year.

Source: Reported data are official estimates of the California Crop and Livestock Reporting Service; other data are estimates of the subcommittee.

TABLE 2

Prices Received by California Farmers; Specified Agricultural Commodities During Specified Periods and Assumptions Projected for 1952

	Units	State average 1947	State average 1948	State average 1949	State average 1950	State average 1947-1950	State price 1951[a]	Index 1952	Average price 1952
Corn (all)	Hundredweight	4.98	3.10	2.75	3.30	3.53	3.66	108.66	3.83
Sorghum	Hundredweight	4.68	2.98	2.86	2.86	3.34	3.20	95.59	3.19
Cotton (all upland)	Pound	.33	.31	.28	.44	.34	.44	107.57	.36
Sugar beets	Ton	12.30	11.00	11.00	10.90	11.30	11.40	90.78	10.25
Potatoes:									
Early	Hundredweight	2.65	2.65	2.24	1.74	2.32	2.45	85.27	1.98
Late	Hundredweight	3.08	2.75	2.67	2.21	2.69	3.00	93.23[b]	2.69[b]
Beans (dry edible)	Hundredweight	14.80	9.70	8.70	10.80	10.80	9.15	93.06	10.05
Hops	Hundredweight	63.00	59.00	58.00	63.00	60.70			
Oats (all)	Hundredweight	3.59	3.15	2.78	2.81	3.04	3.35	111.34	3.30
Barley (all)	Hundredweight	3.22	2.70	2.33	2.29	2.63	3.00	107.14	2.82
Wheat	Hundredweight	3.98	3.60	3.30	3.40	3.56	3.60	103.90	3.69
Flaxseed	Bushel	7.00	6.18	3.94	3.86	5.24	4.30	71.39	3.74
Rice	Hundredweight	6.13	4.40	3.42	4.40	4.58	4.60	108.91	4.98
Hay (all):									
Baled	Ton	24.40	27.20	22.10	19.50	23.30	27.15	102.25	23.82
Wild	Ton	20.70	20.90	18.60	17.50	19.42		102.25	19.85
Alfalfa hay (baled)	Ton	24.60	27.80	22.40	19.70	23.62	27.70	102.25	24.15
Seeds:									
Alfalfa	Bushel	13.50	17.60	16.70	16.40	16.05	15.00		
Ladino	Hundredweight	150.00	160.00	130.00	120.00	140.00			
Asparagus	Ton	--	186.33	199.70	221.59	202.57	255.56		
Cantaloupes:									
Spring	Carton (70 pounds)	4.20	4.55	3.20	4.10	4.01	4.60		
Summer	Carton (70 pounds)	3.50	2.80	3.20	3.00	3.12	3.20		

(Continued on next page.)

Table 2 continued.

	Units	State average 1947	State average 1948	State average 1949	State average 1950	State average 1947-1950	State price 1951a/	Index 1952	Average price 1952
Carrots:									
Winter	Crate (75 pounds)	2.40	5.40	2.70	2.40	3.22	2.85		
Spring	Crate (75 pounds)	2.70	3.15	2.55	2.40	2.70	3.75		
Fall	Crate (75 pounds)	4.95	2.55	3.30	2.85	3.41	4.35		
Celery:									
Winter	Crate (65 pounds)	3.87	2.50	3.30	2.25	2.98	2.75		
Spring	Crate (65 pounds)	4.80	2.00	2.25	2.38	2.85	1.88		
Fall	Crate (65 pounds)	2.25	2.37	1.75	2.75	2.27	2.25		
Summer	Crate (65 pounds)	--	2.62	1.90	2.25	2.26	2.25		
Lettuce:									
Winter	Crate (70 pounds)	3.40	3.20	4.65	3.10	3.58	2.50		
Spring	Crate (70 pounds)	4.00	4.30	2.45	3.00	3.43	3.55		
Summer	Crate (70 pounds)	3.50	3.00	3.15	2.15	2.95	3.30		
Fall	Crate (70 pounds)	3.00	2.60	4.70	2.40	3.18	3.45		
Tomatoes:									
Processing	Lug (32 pounds)	29.00	25.80	23.20	23.50	25.37	30.20	107.27	27.08
Early spring	Lug (32 pounds)	3.45	3.30	2.40	2.45	2.90	2.90	102.66	2.97
Early summer	Lug (32 pounds)	1.90	1.80	1.60	2.55	1.95	2.05	102.66	2.00
Early fall	Lug (32 pounds)	2.73	1.95	2.00	2.15	2.20	2.35	102.66	2.26
Honeydews:									
Spring	Crate (35 pounds)	2.30	2.15	--	--	2.22	2.40		
Summer	Crate (35 pounds)	2.05	1.75	1.75	1.80	1.84	1.95		
Almonds	Ton	558.00	422.00	330.00	546.00	464.00	410.00		
Apples	Bushel	.70	1.00	.62	1.15	.87	1.05	110.06	.96
Apricots	Ton	82.70	65.00	72.70	91.20	77.90	116.00		
Avocados	Ton	388.00	400.00	400.00	446.00	408.50	340.00		
Cherries	Ton	251.00	326.00	182.00	272.00	257.75	356.00		
Figs:									
Fresh	Ton	116.00	98.10	102.00	133.00	112.28	162.00		
Dried	Ton	123.00	139.00	170.00	283.00	178.75	195.00		

(Continued on next page.)

Table 2 continued.

	Units	State average 1947	State average 1948	State average 1949	State average 1950	State average 1947-1950	State price 1951a/	Index 1952	Average price 1952
Grapes:									
Wine	Ton	33.40	35.70	29.80	73.60	43.12	40.40		
Table	Ton	45.60	35.50	31.30	58.00	42.60	31.40		
Raisins:									
Fresh	Ton	34.00	38.20	34.40	64.60	42.80	36.80		
Dried	Ton	132.00	134.00	134.00	262.00	165.50	162.00		
Grapefruit:									
Desert	Box (65 pounds)	.92	1.17	1.09	1.67	1.20	1.11	102.27	1.22
Others	Box (68 pounds)	1.47	1.09	1.78	1.41	1.44	1.16	102.27	1.47
Lemons	Box (77 pounds)	2.67	2.57	4.21	3.59	3.26	2.83	73.30	2.39
Oranges:									
Valencia	Box (77 pounds)	1.47	1.87	1.71	1.89	1.74	1.78	104.72	1.81
Others	Box (77 pounds)	2.30	1.70	2.44	2.25	2.17	2.58	104.72	2.26
Olives	Ton	150.00	145.00	190.00	231.00	179.00	149.00		
Peaches:									
Cling	Ton	49.90	63.30	40.00	60.10	53.32	77.30	118.63	63.45
Free	Ton	46.10	58.90	46.90	76.90	57.20	68.50	118.63	68.07
Pears:									
Bartlett	Ton	74.90	118.20	32.50	75.70	75.32	98.90	114.19	85.86
Others	Ton	65.70	90.10	23.90	67.60	61.82	75.10	114.19	70.47
Plums	Ton	124.00	115.00	72.10	147.00	114.52	110.00		
Prunes	Ton	148.00	152.00	164.00	245.00	177.25	166.00		
Walnuts	Ton	388.00	442.00	363.00	392.00	396.25	434.00		
Strawberries:									
Early spring	36 pounds	10.80	9.40	7.20		9.13			
Mid-spring	24 quarts	9.50	8.60	8.30		8.80			

(Continued on next page.)

Table 2 continued.

	Units	State average 1947	State average 1948	State average 1949	State average 1950	State average 1947-1950	State price 1951a/	Index 1952	Average price 1952
Hogs	Hundredweight	25.80	25.00	20.50	20.40	22.92	22.30	96.9	22.21
Cattle (beef)	Hundredweight	18.50	22.60	19.10	22.60	20.70	28.60	127.6	26.41
Sheep	Hundredweight	7.20	8.00	9.20	9.60	8.50	15.40	153.8	13.07
Lambs	Hundredweight	20.40	22.80	23.60	25.30	23.02	31.99	132.7	30.55
Calves	Hundredweight	20.00	25.30	23.10	27.20	23.90	34.50	129.2	30.88
Wool	Pound	.43	.48	.50	.56	.492	.90	203.0	1.00
Whole milk, wholesale	Hundredweight	4.44	4.87	4.30	3.96	4.39	4.60	114.4	5.02
Butterfat	Pound	.75	.84	.66	.64	.722	.76	107.7	.78
Chickens	Pound	.324	.344	.292	.271	.308	.30	105.6	.32
Turkeys	Pound	.342	.467	.333	.285	.357	.35	95.5	.341
Eggs	Dozen	.535	.548	.514	.415	.503	.54	108.3	.545

a/ Preliminary.

b/ Average of intermediate and late.

Source: Prepared in Division of Agricultural Economics, Davis, August 31, 1951, on basis of "Income, Price, and Cost Assumptions ... 1955," U. S. Bureau of Agricultural Economics, June 20, 1951 (working draft only). See footnote 3, page 3, for explanation of 1952 projected prices.

evaluation was made of the amounts of any such subsidy in relationship to given changes in acreage for a specific crop. Such analysis was not considered within the province of this study.

The enthusiasm for cotton, growing out of its highly favorable price relative to alternative crops during the 1950 marketing season, brought into use both certain land that is not best adapted to cotton and a not inconsiderable number of operators lacking either experience or adequate finance. Both these factors, instrumental in increasing the 1951 acreage, are expected to be corrected in 1952. It also is quite probable that there is inadequate water to maintain the 1951 cotton acreage on a permanent soil management basis. The level of production costs is such that, except where water and other resources are available to produce maximum yields, it may prove unprofitable to grow cotton. Again, in instances where cotton acreage has increased at the expense of grains or other crops interrelated in a definite cropping system, it may be anticipated that some readjustment to a more normal grain acreage will occur in 1952.

Heavy increases in canning tomato acreage were affected to a considerable degree by producer reaction to their difficulty in harvesting the 1950 sugar beet crop. Unusually wet weather during the winter of 1950-51 delayed the harvesting of sugar beets seriously, and in many cases gross and net returns were reduced and farming operations for 1951 were handicapped. It also seems likely that canning tomato acreage itself is expanded to the point that critical labor shortages may handicap harvest and thus lower gross and net returns, whereas, sugar beet acreage is reduced below optimum levels during the 1951 season. It would seem logical for 1952 to see a correction by shifting some tomato acreage into sugar beets or other crops.

Weather conditions, also, were a major factor in determining the acreage pattern for field crops in 1951. The season was unusually wet in the Sacramento Valley until late in the winter. It proved impossible, as a result, to seed wheat and barley according to farmers' earlier intentions. Unusually dry weather later in the spring also was responsible for further reduction in acreage harvested. If weather conditions are normal for the 1952 crop, it is reasonable to expect both planted and harvested acreage of these crops to increase.

The delayed wet spring made it difficult to seed other grain and caused 1951 rice acreage to increase in the Sacramento Valley. Rice acreage, therefore, is expected to be reduced in 1952 as a reaction to the abnormal increase in 1951 and because the acreage is somewhat overexpanded in terms of established soil management practices. The acreage in dry edible beans also was expanded to some degree during 1951 because the weather interfered with farmers' earlier cropping intentions. A small reduction for beans in 1952 is expected to correct this situation.

Some increase in alfalfa acreage is expected in view of its rather sharp reduction between 1950 and 1951. A strong factor favoring increasing alfalfa acreage is the price situation. Alfalfa prices in California are relatively independent of those in the rest of the country and, as projected for 1952, do favor some increase in acreage.6/ It also is anticipated that the acreage of

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6/ Actual prices at the end of 1951 were well above the 1952 project prices for alfalfa.

weakness of one crop or the strength of any crop could easily be substituted by other crops. Thus, the farmer in Portugal for a specific crop, also minimizes the risk of unfavorable weather conditions in other crops.

The conclusions for action, growing out of the family farmers pilot project in Portugal, are the following: during the 1960 marketing season, tomato farmers in both districts have been not just adapted to market and to their commercialization, but also to the requirements of the processing industry, in regards to tomato. Will these measures of quantities be long-lasting conditions or temporary changes, will these measures be considered as increasing the 1961 acreage, are questions to be considered today in 1961. It also is quite possible that there is an improvement after the activities the 1960 season changes are a permanent and permanent family. The level of production tends to grow fast, since it seems easier to change farming than to establish in farming without family, or any other farming. The measures are available to produce without family, or any other farming. In any case, the measures of farming, in Portugal where further farmers the increase of the acreage of farming or other crops interchanged in a definite or changed areas, it can be interpreted that there was influence in a work method which farmer will adopt in 1961.

Many increases in spring tomato acreage were allocated to a consideration during by producer reasons to use a different in harvesting the tide crops. Best first, Especially we consider during the winter of 1960-61 indicate the harvesting of other fresh vegetables, and to sign some green and red tomato farmers. Second and farming crops are the 1961 and marketing. In this case, farmer farmers should develop acreage level to respond to the acres that modified labor situation and farmers harvest and this harvesting and not reduce acreage. Since farm acreage is reduced below optimum levels during the 1961 season. It could also indicate for 1962 to use a proportion of planting some tomato acreage with other crops or other crops.

Further conditions, also, were a very factor in determining the spring planting for field crops in 1961. The season was unusually wet in the Portuguese farming until June in the winter. It prevent cultivation, as a result, to seed plant and harvest according to farmers within tomatoes. Especially dry weather later in the spring also was responsible for further reduction in acreage farmers. It weather conditions are normal for the 1961 crop, it is not certain to expect less planted and increased acreage of tomato crops in Portugal.

The changed and spring work in addition to and other crops and second 1961 also acreage to increase in the Portuguese field. Since acreage, therefore, is expected to be reduced in 1962 as a reaction to the acreage increase in 1961 in Portugal the crops is another overshadowed in terms of which and will increase the crops is another overshadowed in terms of which and will increase acreage production. The acreage in the spring tomato also has changed to some degree during 1961 because the farmer increased with farmers acreage increase. A small reduction for tomato in 1962 is expected in spring tomato acreage.

Some farmers in Atlantic acreage is expected in view of the rather slow marketing between 1961 and 1962. A strong factor farmers increase Atlantic acreage in the Atlantic. Atlantic farmers in California are strongly and in the Atlantic. Atlantic farmers in California are strongly interested in tomato in the area of the Atlantic and, as mentioned for 1961, it have been important in acreage. It also is anticipated that the acreage of

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1/ Acres grown at the end of 1961 was well above the 1960 product price for 1961.

irrigated pasture will increase again in 1952 by approximately the same 5 per cent rate at which it has continued to increase during recent years. It is economical for dairy producers to make maximum use of irrigated pasture and, thereby, to feed less hay while, increasingly, meat producers also graze their feeder cattle and lambs on irrigated pastures.

No important changes in truck crop acreage are estimated for 1952 other than those already indicated for canning tomatoes. At the levels of acreage prevailing in recent years a considerable increase in truck crop production and in volume of produce harvested could be accomplished under favorable price relationships. This means simply that a considerable volume of these crops ordinarily is left in the field rather than being placed on the market because the price situation is not attractive. Another important fact is that much of the land used for truck crops is double cropped either in another truck crop or, as in the Imperial Valley, in cotton or some longer season cash crop. The over-all pattern of truck crop production in California is fairly well defined in relationship to current prices and market demands. It would be possible, of course, if prices and market demand should increase, to expand considerably both acreage and amounts harvested from a given acreage. It is not contemplated that the price relationships projected for 1952 would accomplish such changes (Table 2).

The situation regarding tree fruits, nuts, and vines is substantially the same as that for truck crops; no important acreage changes are anticipated. California has about 1-1/3 million acres in bearing acreage of fruits, vine crops, and nuts. There, also, is an important area of nonbearing acreage but not enough to make important changes percentagewise in total bearing acreage in any given season. On the other hand, a part of the total bearing acreage reaches the uneconomic stage and is pulled each year. Here again, there is room in many instances to make some increases in total volume marketed in response to more attractive market demand and prices. The projected price relationships for 1952, however, are not expected to induce any major changes in this direction (Table 2). It will be remembered that under the conditions of World War II a sharp shift was accomplished in use of grapes from fresh or vintage purposes to raisin production. There is room in the fruit and nut group for considerable redirection or modification of production and marketing practices in response to definite programs changing the relative returns from alternative use.

Crop Yields

The work of the subcommittee in preparing 1952 crop yield estimates would have been facilitated had the detailed analysis of 1955 attainable productive capacity been available. As matters developed, estimates for 1952 were prepared without benefit of this information (Form 2). A comment by one member of the committee is highly relevant in this connection, however: "Base period yields are of very limited importance in preparing estimates for a given year in California due to the fact that the technology of production continues at such a rapid rate." This fact was recognized and carefully considered by the special subcommittee as the 1952 estimates were prepared.

The estimated yield for cotton in 1952 is 700 pounds of lint per acre or 100 pounds above the base period average. This relationship, rather typical of the yields projected for 1952, reflects the broad gains accompanying general adoption of improved production techniques. The 1952 estimated cotton yield is lower, however, than the 803 pounds for 1950. It is recognized that the rapid

FORM 2

Crop and Pasture Yields Per Acre in California;
Estimates of 1952 Attainable with Comparisons[a]

Crop	Acreage	Unit	Base period	Yield per bearing acre: Average for base period	Yield per bearing acre: 1950	Yield per bearing acre: 1952 attainable[b]
	1	2	3	4	5	6
Corn, all	Planted	Bushels	1940-1949	32.4	34.0	33.5
All sorghums for grain	Harvested	Bushels	1940-1949	36.8	39.0	38.0
All upland cotton	Planted	Pounds	1940-1949	564	803	700
Sugar beets	Planted	Tons	1940-1949	15.2	17.9	19.0
Irish potatoes:						
Late	Planted	Bushels	1945-1949	340.0	375.0	375.0
Early	Planted	Bushels	1945-1949	400.0	400.0	430.0
Beans, dry edible	Planted	Pounds	1940-1949	1,294	1,421	1,400
Beans, standard Lima	Planted	Pounds	1940-1949	1,355	1,875	1,800
Beans, baby Lima	Planted	Pounds	1940-1949	1,502	1,708	1,650
Beans, other	Planted	Pounds	1940-1949	1,213	1,173	1,200
Hops	Planted	Pounds	1940-1949	1,490	1,715	1,600
Oats for grain	Harvested	Bushels	1940-1949	29.4	32.0	31.0
Barley for grain	Harvested	Bushels	1940-1949	28.4	32.0	31.0
Winter wheat	Planted	Bushels	1940-1949	15.8	19.3	18.0
Spring wheat	Planted	Bushels				
Flaxseed	Planted	Bushels	1940-1949	18.3	23.6	28.0
Rice	Planted	Pounds	1940-1949	2,927	3,240	3,300
Hay, wild	Harvested	Tons	1940-1949	1.26	1.25	1.25
Hay, alfalfa	Harvested	Tons	1940-1949	4.42	4.60	4.60
Hay, grain	Harvested	Tons	1940-1949	1.56	1.50	1.50

a/ Prepared August 30, 1951, by Special Subcommittee of California State Committee on Agricultural Productive Capacity.

b/ Assuming 1952 cropping pattern (Form 1, column 4), level of practices attainable by 1952, and normal weather.

Sources: Reported data are official estimates of the Crop and Livestock Reporting Service; other data are estimates of the Subcommittee.

expansion in acreage and the influx of new operators, plus shortages of water in certain situations, will reduce yield in 1952, as in 1951, from its extremely high 1950 level. It was pointed out above that the 1950 production was on an acreage sharply reduced by the Production and Marketing Administration program. It is not surprising under such circumstances that the extremely high yield resulted. Yields of other crops, in general, are estimated to be somewhat higher in 1952 than in 1950, though most changes are not sharp percentagewise. It is important here to recognize that the 1950 yield per acre was not adjusted to a "normal weather condition pattern." These adjustments were not made because in the judgment of the subcommittee it did not seem feasible to establish a general basis for making the adjustments. It may be noted, however, that where cereal crops are estimated at somewhat smaller yields in 1952 than in 1950, it is in recognition that weather conditions during the growing season--in the spring of 1950--may have been somewhat more favorable than normal.

Livestock Numbers and Production

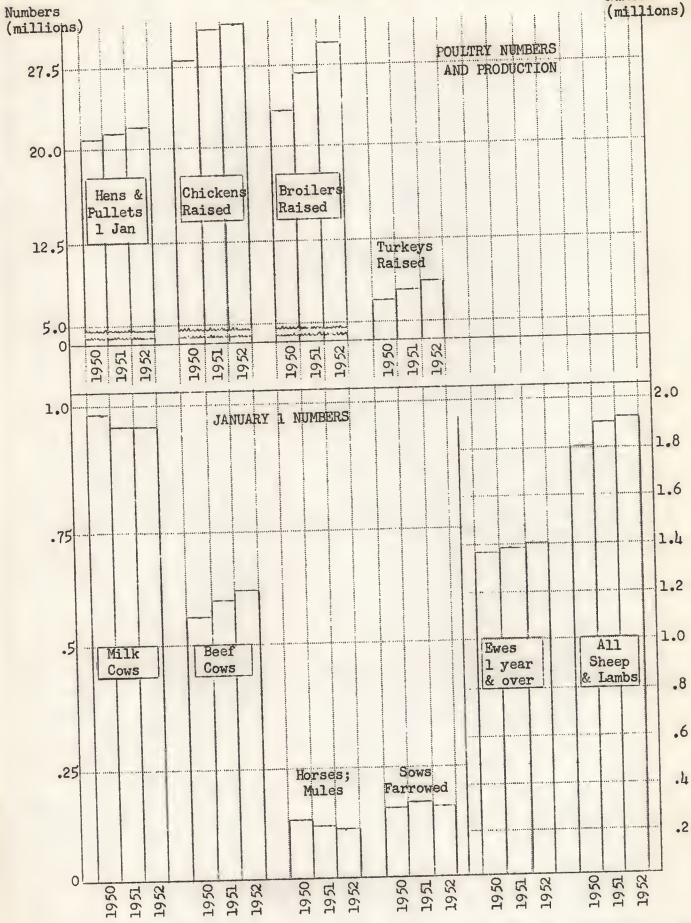
Cattle and Calves.--Total California meat supply comes from four main sources: (a) inshipments of meat, (b) inshipments of live animals for immediate slaughter, (c) inshipments of stocker and feeder animals for further growth and/or fattening before slaughter, and (d) meat animals produced in basic herds on farms and ranges within the state. Other states are major contributors to this total. Both slaughtering plants and producers are thus partly dependent upon production in other states. Year-to-year fluctuations in slaughter result from changes in items (b), (c), and (d), and California production is affected by changes in items (c) and (d). It is obvious that annual inventories of livestock on farms are similarly affected as well as by marketings, seasonality of inshipments, and other causes.

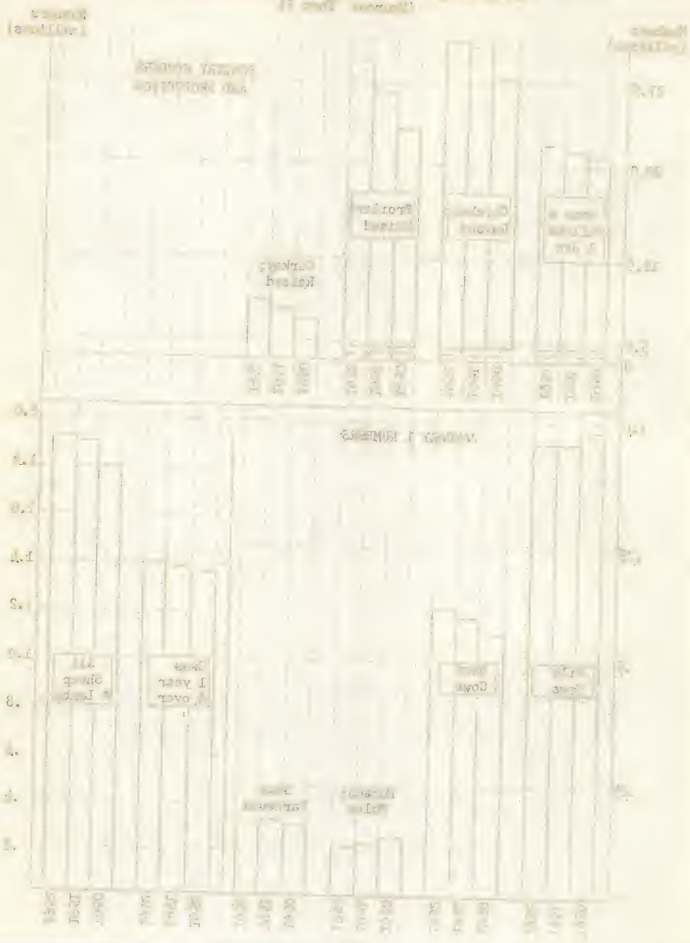
Cattle and calves are increasing in California (Figure II). The 2,872,000 head on farms, January 1, 1951, represented a gain of 163,000 during 1950 and was the largest inventory since January 1947 (Form 3). Numbers had declined each year from 1947 to 1950. Gains during 1950, as compared with 1949, accompanied a decrease in marketings from 1,764,000 to 1,582,000 and an increase in inshipments of from 617,000 to 953,000 stockers and feeders. Almost all of the inventory increase was in beef animals--52,000 in cattle on feed, 38,000 in beef cows, and 66,000 in other beef cattle.

The subcommittee estimates the inventory of all cattle and calves on January 1, 1952, will be 3,100,000 head. This is an increase of 228,000, or 8 per cent over 1951, as compared with an increase of 163,000 during 1950. This estimate regarding 1951 assumes (a) that inshipments of stockers and feeders will approximate 985,000 head or 18 per cent over 1950, (b) that 1951 slaughter of California cattle and calves will approximate 1,450,000 or 3 per cent under 1950, and (c) that the percentage of calf crop, death loss, farm slaughter, and outshipments will be proportionate to last year. Data for the first half of 1951 support these assumptions. Declines amounted to 15 per cent for cattle shipped in for immediate slaughter, 6 per cent for California stock killed, and 8 per cent for total inspected slaughter. Stockers and feeders shipped in, on the other hand, increased 16 per cent.

The big movement in inshipments is yet to come during the last half of the year. The early movement probably was augmented by stock from drouth areas of Texas and New Mexico which will not be available for the fall movement. The

Figure II--Livestock numbers and poultry production in California; 1950, 1951, and estimates of 1952 attainable.
(Source: Form 3)





FORM 3

Numbers of California Livestock and Production of Livestock and Livestock Products; Estimates of 1952 Attainable, with Comparisons[a]

Item of livestock and livestock products	Unit	Reported for 1950	Reported or estimated for 1951	1952 attainable
	1	2	3	4
		1,000 units		
On farms, January 1:				
Horses, mules, and colts	Number	116	114	112
Cattle and calves, all	Number	2,709	2,872	3,100
Cows kept for milk, 2 years	Number	903	885	885
Other cows, 2 years	Number	559	597	620
Sheep and lambs, all	Number	1,819	1,867	1,900
Ewes, 1 year	Number	1,340	1,367	1,400
Hens and pullets	Number	21,314	21,444	22,500
During year:				
Sows farrowed, spring	Number	81	85	81
Sows farrowed, fall	Number	66	68	66
Chickens raised (excluding commercial broilers)	Number	28,470	32,456	32,456
Commercial broiler production	Number	23,484	27,000	30,000
Turkeys raised	Number	7,035	8,020	8,500
Cattle and calves put on feed[b]	Number	650	900	900
Sheep and lambs put on feed[b]	Number	180	215	220
Milk cows, average during year	Number	813	813	813
Milk produced	Pound	6,024,000	6,025,000	6,030,000
Eggs produced	Dozen	269,417	270,000	270,000
Wool produced	Pound	15,547	16,024	16,300

a/ Prepared August 30, 1951, by Special Subcommittee of California State Committee on Agricultural Productive Capacity.

b/ Twelve-month period beginning October 1 of preceding year.

Sources: Reported data are official estimates of the California Crop and Livestock Reporting Service; other data are estimates of the Subcommittee.

decline in slaughter of California stock during the first half of 1951 was due to a 43 per cent drop in calf slaughter accompanied by an 8 per cent increase in cattle slaughter. It is expected that rates of slaughter will increase in late 1951, and that the total for the year may approach the number in 1950. The committee has considered these facts in estimating the January 1, 1952, inventory at 3,100,000 head of cattle and calves. This figure easily could be too low.7/

"Cattle put on feed" is not a well-defined category in California and other western states. West Coast markets accept grass-fat cattle with far less price discrimination compared with grain-fed cattle than eastern markets. As a result, many cattle in California are marketed direct from the range or are fattened on irrigated pasture with or without supplemental concentrates. Some of the cattle on irrigated pasture at any one time eventually will be marketed for slaughter, while others will go on to native range, to crop aftermath pasture, or to dry-lot feeding. The committee's estimate of 650,000 "cattle put on feed" during 1950 and 900,000 for 1951 and 1952 includes all dry-lot fed cattle plus the estimated proportion of cattle on irrigated pasture that went or will go direct to slaughter. This number represents for 1951 and 1952 about 90 per cent of the slaughter of beef-type cattle and calves moving to market from California farms and ranges (Table 3).

Production of cattle and calves includes the aggregate of marketings, farm slaughter, and change in inventory. Marketings, in turn, are made up of slaughter and outshipments. An average of 1,773,000 head of cattle and calves moved to market annually from California farms and ranges during the four years 1947-1950. An average of 754,000, or 42 per cent, was first shipped into the state as stockers and feeders while the remaining 1,019,000 represent production from California's basic beef and dairy herds. Production was reduced in 1950 when 1,582,000 head were marketed. Inshipments number 953,000--60 per cent--and the remaining 629,000 were from basic herds. Basic herd inventories were increased, however, by 163,000 head. This total production was divided as 1,193,000 beef cattle and 535,000 dairy cattle (Table 3). Net production (excluding inshipments) amounted to 775,000 head--306,000 from beef and 469,000 from dairy animals.

A more detailed, though tentative, estimated breakdown of inventories and marketings by beef animals and dairy animals and by cattle and calves is shown (Table 3). These estimates suggest that of the 1,509,000 cattle and calves from California farms slaughtered during 1950, approximately 995,000 were animals of beef breeding and 514,000 were of dairy breeding. Calf slaughter was about equally divided between dairy (vealers) and beef.

Sheep and Lambs.--Sheep numbers during 1950 reversed the downward trend which began in 1942, and on January 1, 1951, there were 1,867,000 sheep and lambs on farms--up 48,000 from a year earlier (Figure II). The number is still relatively low--704,000 below the 1940-1949 average and 1,257,000 below the 1930-1939 average of 3,124,000. There are indications that range sheep numbers are continuing to decrease while farm flocks are increasing. These trends have been observed in the annual inventories elsewhere in the United States; the typically range states have reduced sheep numbers and typically "domestic" states have

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7/ The California Crop and Livestock Reporting Service estimates January 1, 1952, number of cattle and calves at 3,160,000.

TABLE 3

Estimated Balance Sheet of Cattle and Calves, California, 1950a/

	January 1, 1950	Calves raised	Inship	Death loss	Marketings: Outship	Marketings: Slaughterb/	Farm slaughter	January 1, 1951
	thousands of head							
Beef animals								
Cattle	1,034	--	516	21	52	808	14	1,133
Calves	200	419	371	26	14	187	28	257
Total	1,234c/	419	887	47	66	995	42	1,390c/
Dairy animals								
Cattle	1,184	--	61	24	5	282	4	1,149
Calves	291	707	5	41	2	232	10	333
Total	1,475c/	707	66	65	7	514	14	1,482c/
All animals								
Cattle	2,218c/	--	577	45c/	57c/	1,090c/	18c/	2,282c/
Calves	491c/	1,126c/	376	67c/	16c/	419c/	38c/	590c/
Total	2,709c/	1,126c/	953c/	112c/	73c/	1,509c/	56c/	2,872c/

a/ The reported figures do not account for all numbers in balance sheet form because only inspected slaughter is reported, and it is known that a considerable number of newborn calves in dairy herds go to rendering plants. The "unbalance" of numbers in the table is wholly allocated to dairy animals whereas a part correctly should be allocated to uninspected slaughter.

b/ Inspected slaughter only; uninspected slaughter is not estimated.

c/ Reported figures; the further breakdown of these totals are estimates of the subcommittee.

Sources: Reported data are official estimates of the U. S. Bureau of Agricultural Economics; other data are estimates of the Subcommittee as indicated.

increased them for two or three years. It is perhaps too early to predict whether sheep numbers in California are definitely on the increase again. Certainly, the current prices of wool and lambs are stimulants in that direction. One indication is that ewes, even of questionable quality, are being sought actively by growers.

The committee estimated that all sheep and lambs on farms and ranges would increase slightly to 1,900,000 by January 1, 1952, compared with 1,867,000 for 1951, and that the increase would come largely in breeding ewes (one-year old and over).

The ambiguity of the term "put on feed" is even more pronounced for sheep and lambs than for cattle when applied to western conditions. The number officially reported as "on feed" on specific dates includes both feed lot and irrigated pasture operations; animals in breeding flocks on irrigated pasture are excluded as far as practicable. The committee estimated that approximately 180,000 sheep and lambs were put on feed during the year 1950 compared with about 167,000 on feed on January 1, 1950, and 165,000 on January 1, 1951. The estimated number to be put on feed is 215,000 during 1951 and 220,000 during 1952.

Production from California farms and ranges includes the aggregate of marketings, 1,340,000[8]; farm slaughter, 26,000; and change in inventory, 48,000. The total amounted to 1,414,000 head of sheep and lambs in 1950. Of this number a net--allowing for death losses--of about 600,000 had been shipped into the state for further growth or fattening before slaughter. Net production from California flocks, therefore, was about 814,000.

The committee estimated wool production at 16,300,000 pounds in 1952 which is 276,000 pounds--2 per cent--above 1951. The projected wool clip is proportionate to the estimated increase in stock sheep.

Dairy Cows and Milk Production.--The number of dairy cows two-years old and over on farms January 1, 1951, is estimated at 885,000, the same as for 1948 and 1949 (Figure II). This is a reduction of 18,000 from January 1, 1950. Dairy cow inventories were reduced in 1950 mainly due to heavier-than-usual culling of low producers stimulated by high prices for slaughter cattle. Some minor reduction came from a shift of land to cotton in local areas. Some of the animals from such herd dispersals were bought by other dairy farmers so that the net reduction in dairy cow numbers was not as great as the reduction in numbers of dairies. The number milked has remained equal to a year ago. The committee estimates that inventories on January 1, 1952, will again be 885,000 head.

The reported average number of cows milked in 1950 was 813,000 head as compared with 810,000 during 1949. The number of cows milked during 1949, a year when there was no change in inventories, was 91.5 per cent of the number on farms on January 1. The subcommittee assumes this ratio will continue in 1951 and 1952 and, therefore, estimates that an average of 813,000 cows will be milked each year.

Milk production per cow has been increasing steadily since 1942 when California dairy cows averaged 6,880 pounds each. Average per cow in 1950 was 7,410 pounds, and this high level of production has continued into 1951. Milk production for January through July 1951 averaged 3,050 pounds per cow, and the total

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8/ Includes outshipments and inspected slaughter only.

[illegible]

[illegible]

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was 36,430,000 pounds hundredweight state total compared with 4,597 pounds and 36,410,000 pounds hundredweight, respectively, for the same period of the previous year. The number of dairy cows on farms on June 1 was 814,000 both years. The subcommittee estimates that 1951 milk production will be 60,250,000 pounds hundredweight, and that production in 1952 will be approximately the same.9/

Horses and Mules.--The subcommittee estimated that numbers will continue to decline at the rate of recent years and will approximate 112,000 head on January 1, 1952, compared with 114,000 on that date in 1951 and 116,000 in 1950 (Figure II).

Chickens and Turkeys.--The actual number of layers month by month after January was lower in 1951 than a year earlier in spite of the slight increase in January 1 laying flock inventories. Moreover, the average rate of lay per layer during the first seven months of 1951 was slightly lower than for 1950--114 as compared with 116 per layer. Total egg production for the first seven months, therefore, is down 2.8 per cent. More favorable egg-feed price ratios after the early months of the year, however, were accompanied by increases in the average rate of lay. This rate was 3.1 eggs higher in July of 1951 than a year earlier.

The egg-feed price ratio is expected to continue at a relatively favorable level throughout the remainder of 1951 and all of 1952. The result should be a moderate increase in inventory of layers in January 1951 and a substantial expansion in 1952. The committee estimates the number of hens and pullets on farms on January 1, 1952, at 22,500,000, and egg production for 1951 at 261,333,000 dozen, and for 1952 at 270,000,000 dozen.

California's 1951 estimated number of chickens raised, excluding broilers, is currently reported at 32,456,000, 14 per cent higher than last year (Figure II). This large increase will easily permit the projected increase in hens and pullets for next January. The committee estimates the 1952 number of chickens raised at the same figure--32,456,000.

The phenomenal growth of the broiler industry in California during and since World War II is common knowledge. It has resulted directly from favorable feed-price ratios coupled with widespread increased efficiency in production. Price ratios are favorable because of the strong demand for chicken meat. These improvements in technology and efficiency have permitted volume production of broilers at prices highly attractive to the consumer in comparison with those for "red meats," hence the strong demand.

The committee estimates commercial broiler production for 1951 at 27,000,000 compared with 23,484,000 in 1950. The estimate for 1952 is tentatively set at 30,000,000. Actually, there is no rational basis for predicting at what level or when commercial broiler production may stabilize itself. Currently there are no indications of any slackening in the growth of this industry.

The statements relating to broilers also apply in large measure to turkeys. An added factor that has been important is the broadening of the market to cover most of the year in contrast to its earlier seasonal orientation. It is possible, on the other hand, that there is less room in the near future for a continued rapid rate of expansion in turkey production.

9/ Preliminary estimates set California milk production in 1951 at 7,781 pounds per cow and 60,080,000 pounds hundredweight total.

[illegible]

[illegible]

[illegible]

Variations Among Major Districts of California in 1952 Attainable Productive Capacity

The three major areas in California showing sharp and important changes in the cropping pattern between 1950 and 1951 are the ones where changes again may occur in 1952. The San Joaquin Valley experienced the greatest total shift in acreage between 1950 and 1951. Approximately 700,000 more acres were in cotton in 1951 than in 1950. On the other hand, barley, alfalfa, potatoes, sugar beets, and grain sorghums all showed important decreases while the acreage in fallow, idle, and pasture also was reduced between 1950 and 1951. Barley and alfalfa showed decreases of well over 100,000 acres each and almost 500,000 acres were removed from the crops indicated. Some 200,000 acres were picked up from idle, newly developed land, rotation, fallow, pasture, and minor uses. A considerable acreage of land was leveled and provided with irrigation facilities during the 1949 and 1950 seasons chiefly through well irrigation. Cotton has been assigned a major portion of this new acreage.

The Sacramento Valley also experienced sharp changes in the cropping pattern between 1950 and 1951. It is estimated by the committee that sugar beets decreased about 19,000 acres while barley and wheat in total declined 89,000 in 1951. Rice, on the other hand, increased 75,000 and dry beans, 19,000 acres, with tomatoes somewhat near the latter amount. It was pointed out above that unfavorable weather, preventing the planting of cereal crops, had much to do with the increases in rice and dry beans in this area. On the other hand, decidedly unfavorable weather for harvesting beets in 1950 and relatively improved price prospects for tomatoes in 1951 were largely responsible for shifts of these crop acreages. It is anticipated that important readjustments in the direction of the 1950 crop pattern will be made between 1951 and 1952 in the Sacramento Valley.

The Imperial Valley and the rest of California south of the Tehachapi Mountain Range made tremendous increases percentagewise in cotton acreage and production in 1951 compared with 1950. The jump in Imperial County was from less than 1,000 to about 38,000 acres, while the remainder of the southern area showed a ninefold increase--from 3,000 to over 26,000 acres. It was the consensus of the subcommittee that acreage of the cereal group, chiefly grain sorghums, was reduced about 10,000 acres in Imperial County and about 60,000 acres in the remainder of the southern area. Much of this land, however, was not planted in cotton; it represented a reduction due to the weather conditions already described. There is evidence, however, that alfalfa acreage is being reduced in Imperial County and the remainder of the southern area, and that further reductions may occur in 1952. A similar statement appears justified for sugar beets. It also should be recognized, however, that double cropping of cotton after winter crops of vegetables has been quite typical of both Imperial County and the other adapted areas in southern California. It is the judgment of the committee that, under the projected level of prices, cotton quite likely will continue to be the important field crop south of the Tehachapi Mountains.